

INTRODUCTION

Maintenance is a nascent technology which aims to bring about the economical utilization of physical assets. The importance of an effective system of maintenance in an industry need not be over emphasized. Conventional maintenance techniques such as breakdown maintenance and preventive maintenance have their own limitations in detecting the incipient faults at the right moment. Emphasis on reducing maintenance cost and downtime has led to the implementation of Condition Monitoring and is considered as a tool which can quickly identify the problem and recommend appropriate repair action.

Presently there exists a big gap between the availability and requirement of trained manpower in this particular vital field for its effective maintenance and troubleshooting. To bridge the gap, it is essential that the application engineers and maintenance personnel should have the first hand theoretical knowledge to enable them to tackle practical problems encountered during installation, operation and maintenance of mining equipment. Such knowledge will be useful to operate the machine using hydraulic system as prime source of power transmission at optimum level.

The course will provide the foundational skill of maintenance, lubrication and automation of mining equipment. Through this course, the Participants will be able to use the best practices for selecting the design of hydraulic system and lubricant testing to boost reliability and generate lasting results in machine equipment.

COURSE CONTENT

- Fundamentals of Maintenance
- Lubricants and Lubrication
- Condition Based Maintenance: Oil Analysis and Vibration Analysis
- Fundamentals of Automation in HEMM
- Software based Hydraulic circuit design

- Tutorials on Trouble shooting of Hydraulic Systems with software
- Practical Classes
- Field / Plant Visits

ABOUT IIT(ISM) DHANBAD

The **Indian Institute of Technology (Indian School of Mines), Dhanbad** is a fully residential and co-educational institute situated in the heart of the country's prime coking coal belt, 260 kms from Kolkata with a campus spread over an area of 393 acres, (with 218 acres of existing campus and 175 acres under acquisition and development) the fully residential IIT(ISM) has all the facilities of world class academic institute. What started as an institution to impart mining education has graduated into a full-fledged technical institution of international acclaim offering a host of programmes like B. Tech., M. Tech., M. Sc. Tech., and MBA. In addition the School offers M. Phil. and full as well as part time Ph. D. programmes, while also awarding D.Sc. as the highest degree of academic achievement.

DATE and DURATION:

One Week (7th May to 12th May, 2018)

INTENDED PARTICIPIANTS

Participants should be practicing engineers from mines and allied fields, Post Graduate Students, Research Scholars, Faculty Members, and Scientists working in the field of Maintenance Engg., Hydraulic System and Tribology.

REGISTRATION (Excluding 18% GST)

External Participants (outside IIT (ISM))	
Post Graduate students	Rs. 10,000/-
Research Scholars	Rs. 15,000/-
Faculty members and Scientists	Rs. 20,000/-
practitioners from Industry	Rs 32,000/- (non-resident participant)
	Rs 35,000/- (residential participant)

- **More than 4 participants from a particular industry will get 10% discount from the base amount.**
- A/C room accommodation at EDC in IIT (ISM) will be provided for residential participant.
- Accommodation and dinner will not be available for non-resident participant.
- **Extra 18% GST will be charged per participants.**
- Fooding and lodging shall not be provided to participants from IIT(ISM) and the course fee is as per the IIT (ISM) rules.

NOMINATION & PAYMENT

Nomination along with course fee in the form of Demand Draft in favor of "**Registrar, Indian Institute of Technology (ISM), Dhanbad-826004**" payable at any bank available in Dhanbad, should reach to Course Coordinator at the address as given above on or before **25.4.2018**. The formal consent for attending the workshop may be sent in advance through email to the Coordinator.

The details for online transaction (e-payment) of the fee is given below*:

Name of Beneficiary: **Indian Institute of Technology (ISM), Dhanbad**
Address: Dhanbad, Jharkhand, Pin:-826004.
Bank Name: Canara Bank
Branch Name: Saraidhela, Dhanbad-828127
MICR Code: 826015003, IFSC code: CNRB0000986
Account no.: 0986101009746
Type of account: Saving
PAN No: AAAAI0686D
GST No: 20AAAAI0686D1ZA

COURSE COORDINATORS:

Dr. Subrata Kumar Ghosh

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Mobile: +91- 9471191639,
Email: jayanta_mech_engg@yahoo.co.in

***Kindly send a copy of transaction with duly filled registration form to the course coordinator before 25.04.2018.**

REGISTRATION FORM

**ONE WEEK SHORT TERM COURSE
ON
MAINTENANCE, LUBRICATION AND
AUTOMATION OF MINING EQUIPMENT
(7th May to 12th May, 2018)**

1. Name: _____

(Capital Letters with Surname underlined)

2. Organization/Institute: _____

3. Designation/Dept.: _____

4. Qualification: _____

5. Specialization: _____

6. Gender : (M/F) _____

7. Mailing Address: _____

8. Mobile: _____

9. E-mail _____

10. Registration Fee: _____

11. Mode of payment: _____

Amount: _____

DD No./ Transaction ID: _____

Date: _____

Issuing Bank: _____

SIGNATURE: _____

Date: _____

**ONE WEEK SHORT TERM COURSE
ON
MAINTENANCE, LUBRICATION AND
AUTOMATION OF MINING
EQUIPMENT
(7th May to 12th May, 2018)**

Coordinator

**DR. SUBRATA KUMAR GHOSH
and**

DR. JAYANTA DAS



Organized by

**DEPT. OF MECHANICAL
ENGINEERING
AND
DEPT. OF MINING MACHINERY
ENGINEERING**

**Indian Institute of Technology (ISM)
Dhanbad– 826004,
JHARKHAND
INDIA**